COTTON CHATS

DRAPER CORPORATION
HOPEDALE, MASSACHUSETTS

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HOPEDALE MASS.

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THE NORTHROP LOOM IN THE WORSTED FIELD

Early attempts to use the Northrop loom to weave single-filling Worsteds met with a number of failures because of bar effects in the cloth due to variations in the size of the filling. This was not a peculiarity of the Northrop loom, but a common defect of weaving conditions allowed to exist and persist under the common loom regime—a defect not remedied, but overcome by using a box loom to mix the filling by alternately laying picks from different bobbins.

When we ventured the statement that there was a remedy and that it lay in making the filling of uniform size, the answer came back:

"It can't be done with worsteds."

"What must be done to get the full benefit of modern machinery can be done" has been the motto of a few progressive American manufacturers at every fork in the roads on the forward journey of 19th and 20th century industry; and we found enough Worsted manufacturers

imbued with this spirit to listen to our story of the marvelous improvements made in the preparation of cotton filling and warps since the advent of the Northrop loom.

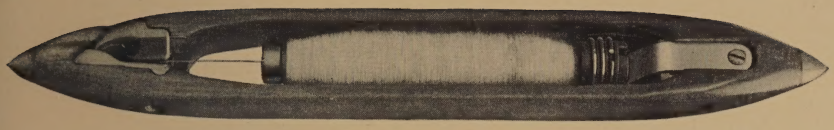
With the old common loom and the need of close and constant attention on the part of the weaver, there was no special inducement to individual or collective research in the field of yarn preparation for the benefit of loom operation. The Northrop loom opened up great possibilities for substantial savings in producing cotton cloth if the number of looms tended by a single weaver could be increased sufficiently. The loom afforded the means; better yarn was a condition. Better yarn, therefore, became a necessity. Necessity brought investigation and research. Research brought results. The results made history in the cotton textile industry.

The worsted manufacturers that we found with the "can be done" spirit shared our faith that what had been done in the cotton field could be duplicated in theirs; and had imagination enough to comprehend what the solution of their problem meant to them.

Faith and imagination won, and now "it is done."

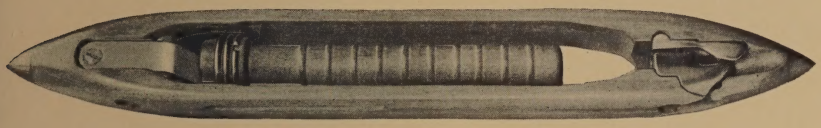
Worsteds are being made today in one-shuttle Northrop automatic filling changing looms without the slightest trace or suggestion of these bar effects. They are being made in many mills where the skeptics held the fort a few years ago. A little more care in yarn preparation did it. A few men of faith led the way—and realized the profits.

One Worsted manufacturer who has been interested in these developments, but who has been afraid he could not benefit from them because he buys all his yarn, put the proposition up to the yarn agency. The way was



Shuttle with Full Worsted Bobbin

Our Worsted Loom takes the Bradford Spun Bobbin without Rewinding



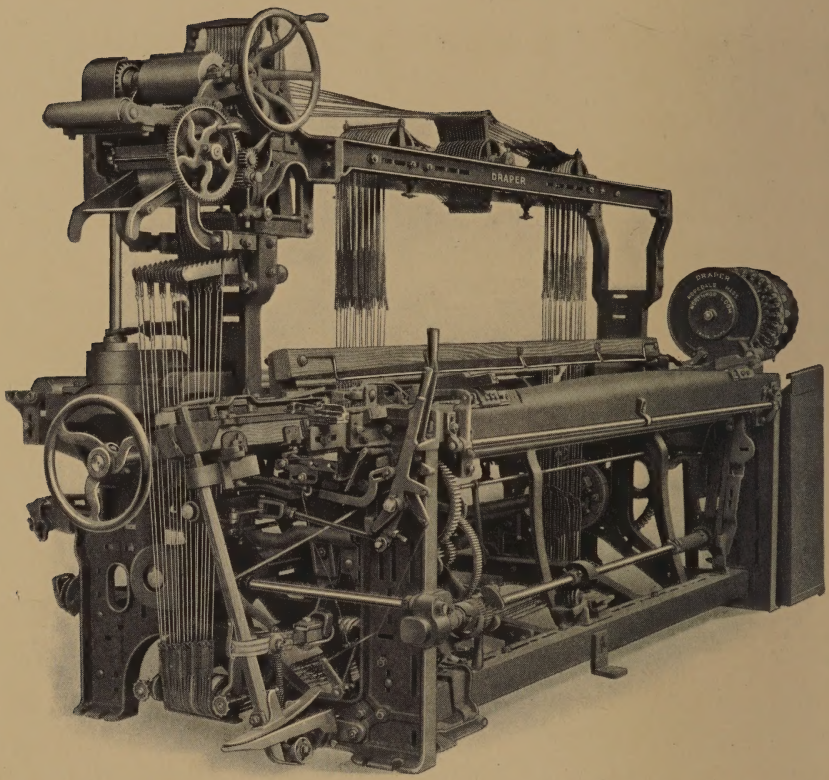
Shuttle with Empty Worsted Bobbin

quickly found. A little more care in the several stages of yarn preparation, larger "mixes" of the raw material and other tricks known to the yarn specialists were called into play, and uniform yarn was the result.

History has again repeated itself. Years ago the cotton manufacturer who did not want Northrop looms because it meant taking a little more pains in the preparation of his yarn was driven to it by the man who was willing to take pains—for a price, which in this case was a great saving in manufacturing costs. Worsted manufacturers are on the brink of the same experience.

The Northrop Worsted loom is saving hundreds of thousands of dollars to the worsted manufacturers who have ventured. It is now entering the woolen field, where it has already demonstrated notable possibilities.

It is supreme in its chosen field of one-shuttle weaving.



OUR WORSTED LOOM

Our Worsted Loom is the latest and most finished product of the loom-maker's art.

It is revolutionizing all ideas of weaving costs in the worsted and woolen field on one-shuttle work.

It has broadened the field of the one-shuttle loom—for along with its perfection and introduction American manufacturers have solved the problem of making filling yarns of even size. Mixing the filling by box looms is no longer necessary.

The loom as usually built has center fork, Crompton & Knowles intermediate worsted head, four-bank warp stop motion with hair-pin drop wire, disc friction pulley with auxiliary drive and driving gears on both ends of the loom, worsted beam with adjustable heads, ratchet and band friction let-off with hanging weights, high roll worm take-up with foot treadle for the release of the take-up clutch, needle feeler, special shuttle feeler thread cutter, special heavy pick motion with long throw, extra heavy lay and whip roll, re-enforced hand rail, pick gears with steel pinions, special clamping yarn beam bearing, independent let-back from center fork and heavy shafts. The battery is adjustable to bobbins from 5 5/8″ to 8″ in length, and all parts of the battery or loom that come in contact with filling or warp are specially polished. Individual motor drive may be had, if ordered.

There are many alternative devices to the above to be had if ordered by the mill.